Sub C1

1. A method of simultaneously removing multiple hair follicles from a skin region of a patient, said method comprising illuminating the hair follicles with a large-area optical radiation field delivered by a transparent contact device positioned proximal to the skin region, wherein said illuminating heats the hair follicles so that they are removed while leaving the skin region substantially free of injury.

2. The method of claim 1, wherein during said illuminating the contact device is in direct contact with the skin region.

Sub C2

3. The method of claim 2, wherein a substance is applied to the skin region prior to illuminating the region.

4. The method of claim 2, wherein the contact device, when in contact with the skin, is cooled to a temperature below that of the skin in order to increase the damage threshold of the skin region.

5. The method of claim 1, wherein during said illumination the contact device focusses the optical radiation onto the skin region.

6. The method of claim 5, wherein during said illumination the contact device focusses the optical radiation below the papillae of the hair follicles.

4.
7. The method of claim 1, wherein the optical radiation is pulsed.

8. The method of claim 7, wherein the optical radiation has a pulse duration of between 50 μs and 200 ms.

~~9~~ 5. The method of claim ~~8~~ 4, wherein the optical radiation has a pulse duration of between 10 and 30 ms.

~~10~~ 8. The method of claim 1, wherein the wavelength of the optical radiation is one which is selectively absorbed by ~~hair~~ the follicles.

~~11~~ 9. The method of claim ~~10~~ 8, wherein the wavelength is between 680 and 1200 nm.

~~12~~ 10. The method of claim ~~11~~ 9, wherein the wavelength is between 800 and 900 nm or between 1000 and 1200 nm.

~~13~~ 11. The method of claim 1, wherein the large-area radiation field has an area of between 0.5 and 1.2 cm^2.

~~14~~ 12. The method of claim ~~13~~ 7, wherein the radiation field has an area of between 0.75 and 1 cm^2.

~~15~~ 6. The method of claim ~~7~~ 4, wherein the radiation pulse has an energy of between 10 and 1000 J/cm^2.

~~16~~ 7. The method of claim ~~15~~ 6, wherein the radiation pulse has an energy of between 30 and 50 J/cm^2.

17. A method of simultaneously removing multiple hair follicles from a skin region of a patient, said method comprising illuminating the hair follicles with a large-area field of pulsed optical radiation wherein:

(a) the field has a pulse duration of between 50 μs and 200 ms;

(b) the wavelength of the radiation is between 680 and 1200 nm;

(c) the area of the field is between 0.5 and 1.2 cm^2; and,

(d) the pulse energy of the field is between 10 and 1000 J/cm^2.

Sub B1

18. A hair-removal device for simultaneously removing multiple hair follicles from a skin region of a patient, comprising

means for generating optical radiation; and

an irradiating unit including a contact device for receiving and then delivering the radiation to the skin region of the patient, said contact device comprising a large-area, optically transparent apparatus having a surface shaped to simultaneously contact the multiple hair follicles in the skin region.

Sub C4

19. The hair-removal device of claim 18, wherein said surface is either convex, concave, or substantially flat.

20. The hair-removal device of claim 19, wherein said contact device is configured to focus light onto the skin region.

16. 15
~~21.~~ The hair-removal device of claim ~~20~~, wherein said contact device ~~is~~ includes a lens.

18. 14
~~22.~~ The hair-removal device of claim ~~18~~, wherein said optically transparent apparatus comprises material selected from the group consisting of sapphire, fused quartz, fused silica, polymeric materials, and glass.

19. 18
~~23.~~ The hair-removal device of claim ~~22~~, wherein said optically transparent material has a refractive index substantially matched to that of the skin region.

20. 19
~~24.~~ The hair-removal device of claim ~~23~~, wherein said material is sapphire.

add C5